

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS:

1-141 (canceled).

142. (previously presented) A cloned DNA of Human Immunodeficiency Virus Type 1 (HIV-1), wherein the DNA comprises the sequence
CTCAATAAAGCTTGCCTTG, and the DNA comprises the sequence:

		5670	5680	5690	5700
		A	AAGAGCAGAA	GACAGTGGCA	ATGAGAGTGA
5710	5720	5730	5740	5750	5760
AGGAGAAATA	TCAGCACTTG	TGGAGATGGG	GGTGGAAATG	GGGCACCATG	CTCCTTGGGA
5770	5780	5790	5800	5810	5820
TATTGATGAT	CTGTAGTGCT	ACAGAAAAAT	TGTGGGTCAC	AGTCTATTAT	GGGGTACCTG
5830	5840	5850	5860	5870	5880
TGTGGAAGGA	AGCAACCACC	ACTCTATTTT	GTGCATCAGA	TGCTAAAGCA	TATGATACAG
5890	5900	5910	5920	5930	5940
AGGTACATAA	TGTTTGGGCC	ACACATGCCT	GTGTACCCAC	AGACCCCAAC	CCACAAGAAG
5950	5960	5970	5980	5990	6000
TAGTATTGGT	AAATGTGACA	GAAAATTTTA	ACATGTGGAA	AAATGACATG	GTAGAACAGA
6010	6020	6030	6040	6050	6060
TGCATGAGGA	TATAATCAGT	TTATGGGATC	AAAGCCTAAA	GCCATGTGTA	AAATTAACCC
6070	6080	6090	6100	6110	6120
CACTCTGTGT	TAGTTTAAAG	TGCACTGATT	TGGGGAATGC	TACTAATACC	AATAGTAGTA
6130	6140	6150	6160	6170	6180
ATACCAATAG	TAGTAGCGGG	GAAATGATGA	TGGAGAAAGG	AGAGATAAAA	AACTGCTCTT
6190	6200	6210	6220	6230	6240
TCAATATCAG	CACAAGCATA	AGAGGTAAGG	TGCAGAAAGA	ATATGCATTT	TTTTATAAAC
6250	6260	6270	6280	6290	6300
TTGATATAAT	ACCAATAGAT	AATGATACTA	CCAGCTATAC	GTTGACAAGT	TGTAACACCT

6310	6320	6330	6340	6350	6360
CAGTCATTAC	ACAGGCCTGT	CCAAAGGTAT	CCTTTGAGCC	AATTCCCATA	CATTATTGTG
6370	6380	6390	6400	6410	6420
CCCCGGCTGG	TTTTGCGATT	CTAAAATGTA	ATAATAAGAC	GTTCAATGGA	ACAGGACCAT
6430	6440	6450	6460	6470	6480
GTACAAATGT	CAGCACAGTA	CAATGTACAC	ATGGAATTAG	GCCAGTAGTA	TCAACTCAAC
6490	6500	6510	6520	6530	6540
TGCTGTTGAA	TGGCAGTCTA	GCAGAAGAAG	AGGTAGTAAT	TAGATCTGCC	AATTTACACAG
6550	6560	6570	6580	6590	6600
ACAATGCTAA	AACCATAATA	GTACAGCTGA	ACCAATCTGT	AGAAATTAAT	TGTACAAGAC
6610	6620	6630	6640	6650	6660
CCAACAACAA	TACAAGAAAA	AGTATCCGTA	TCCAGAGGGG	ACCAGGGAGA	GCATTTGTTA
6670	6680	6690	6700	6710	6720
CAATAGGAAA	AATAGGAAAT	ATGAGACAAG	CACATTGTAA	CATTAGTAGA	GCAAAATGGA
6730	6740	6750	6760	6770	6780
ATGCCACTTT	AAAACAGATA	GCTAGCAAAT	TAAGAGAACA	ATTTGGAAAT	AATAAAACAA
6790	6800	6810	6820	6830	6840
TAATCTTTAA	GCAATCCTCA	GGAGGGGACC	CAGAAATTGT	AACGCACAGT	TTTAATTGTG
6850	6860	6870	6880	6890	6900
GAGGGGAATT	TTTCTACTGT	AATTCAACAC	AACTGTTTAA	TAGTACTTGG	TTTAATAGTA
6910	6920	6930	6940	6950	6960
CTTGGAGTAC	TGAAGGGTCA	AATAACACTG	AAGGAAGTGA	CACAATCACA	CTCCCATGCA
6970	6980	6990	7000	7010	7020
GAATAAAACA	ATTTATAAAC	ATGTGGCAGG	AAGTAGGAAA	AGCAATGTAT	GCCCCCTCCCA
7030	7040	7050	7060	7070	7080
TCAGCGGACA	AATTAGATGT	TCATCAAATA	TTACAGGGCT	GCTATTAACA	AGAGATGGTG
7090	7100	7110	7120	7130	7140
GTAATAACAA	CAATGGGTCC	GAGATCTTCA	GACCTGGAGG	AGGAGATATG	AGGGACAATT
7150	7160	7170	7180	7190	7200
GGAGAAGTGA	ATTATATAAA	TATAAAGTAG	TAAAAATTGA	ACCATTAGGA	GTAGCACCCA
7210	7220	7230	7240	7250	7260
CCAAGGCAAA	GAGAAGAGTG	GTGCAGAGAG	AAAAAAGAGC	AGTGGGAATA	GGAGCTTTGT

7270	7280	7290	7300	7310	7320
TCCTTGGGTT	CTTGGGAGCA	GCAGGAAGCA	CTATGGGCGC	ACGGTCAATG	ACGCTGACGG
7330	7340	7350	7360	7370	7380
TACAGGCCAG	ACAATTATTG	TCTGGTATAG	TGCAGCAGCA	GAACAATTTG	CTGAGGGGCTA
7390	7400	7410	7420	7430	7440
TTGAGGCGCA	ACAGCATCTG	TTGCAACTCA	CAGTCTGGGG	CATCAAGCAG	CTCCAGGCAA
7450	7460	7470	7480	7490	7500
GAATCCTGGC	TGTGGAAAGA	TACCTAAAGG	ATCAACAGCT	CCTGGGGATT	TGGGGTTGCT
7510	7520	7530	7540	7550	7560
CTGGAAAACT	CATTTGCACC	ACTGCTGTGC	CTTGGAATGC	TAGTTGGAGT	AATAAATCTC
7570	7580	7590	7600	7610	7620
TGGAACAGAT	TTGGAATAAC	ATGACCTGGA	TGGAGTGGGA	CAGAGAAATT	AACAATTACA
7630	7640	7650	7660	7670	7680
CAAGCTTAAT	ACATTCCTTA	ATTGAAGAAT	CGAAAACCA	GCAAGAAAAG	AATGAACAAG
7690	7700	7710	7720	7730	7740
AATTATTGGA	ATTAGATAAA	TGGGCAAGTT	TGTGGAATTG	GTTTAACATA	ACAAATTGGC
7750	7760	7770	7780	7790	7800
TGTGGTATAT	AAAAATATTC	ATAATGATAG	TAGGAGGCTT	GGTAGGTTTA	AGAATAGTTT
7810	7820	7830	7840	7850	7860
TTGCTGTACT	TTCTATAGTG	AATAGAGTTA	GGCAGGGATA	TTCACCATTA	TCGTTTCAGA
7870	7880	7890	7900	7910	7920
CCCACCTCCC	AACCCCGAGG	GGACCCGACA	GGCCCGAAGG	AATAGAAGAA	GAAGGTGGAG
7930	7940	7950	7960	7970	7980
AGAGAGACAG	AGACAGATCC	ATTCGATTAG	TGAACGGATC	CTTAGCACTT	ATCTGGGACG
7990	8000	8010	8020	8030	8040
ATCTGCGGAG	CCTTGTGCCT	CTTCAGCTAC	CACCGCTTGA	GAGACTTACT	CTTGATTGTA
8050	8060	8070	8080	8090	8100
ACGAGGATTG	TGGAACTTCT	GGGACGCAGG	GGGTGGGAAG	CCCTCAAATA	TTGGTGGAAT
8110	8120	8130			
CTCCTACAGT	ATTGGAGTCA	GGAATAAAG	AA.		

143. (previously presented) A cloned DNA of Human Immunodeficiency Virus Type 1 (HIV-1), wherein the DNA comprises the sequence

CTCAATAAAGCTTGCCTTG, and the DNA comprises the sequence:

					5700
					ATGAGAGTGA
5710	5720	5730	5740	5750	5760
AGGAGAAATA	TCAGCACTTG	TGGAGATGGG	GGTGGAAATG	GGGCACCATG	CTCCTTGGGA
5770	5780	5790	5800	5810	5820
TATTGATGAT	CTGTAGTGCT	ACAGAAAAAT	TGTGGGTCAC	AGTCTATTAT	GGGGTACCTG
5830	5840	5850	5860	5870	5880
TGTGGAAGGA	AGCAACCACC	ACTCTATTTT	GTGCATCAGA	TGCTAAAGCA	TATGATACAG
5890	5900	5910	5920	5930	5940
AGGTACATAA	TGTTTGGGCC	ACACATGCCT	GTGTACCCAC	AGACCCCAAC	CCACAAGAAG
5950	5960	5970	5980	5990	6000
TAGTATTGGT	AAATGTGACA	GAAAATTTTA	ACATGTGGAA	AAATGACATG	GTAGAACAGA
6010	6020	6030	6040	6050	6060
TGCATGAGGA	TATAATCAGT	TTATGGGATC	AAAGCCTAAA	GCCATGTGTA	AAATTAACCC
6070	6080	6090	6100	6110	6120
CACTCTGTGT	TAGTTTAAAG	TGCACTGATT	TGGGGAATGC	TACTAATACC	AATAGTAGTA
6130	6140	6150	6160	6170	6180
ATACCAATAG	TAGTAGCGGG	GAAATGATGA	TGGAGAAAGG	AGAGATAAAA	AACTGCTCTT
6190	6200	6210	6220	6230	6240
TCAATATCAG	CACAAGCATA	AGAGGTAAGG	TGCAGAAAGA	ATATGCATTT	TTTTATAAAC
6250	6260	6270	6280	6290	6300
TTGATATAAT	ACCAATAGAT	AATGATACTA	CCAGCTATAC	GTTGACAAGT	TGTAACACCT
6310	6320	6330	6340	6350	6360
CAGTCATTAC	ACAGGCCTGT	CCAAAGGTAT	CCTTTGAGCC	AATTCCCAT	CATTATTGTG
6370	6380	6390	6400	6410	6420
CCCCGGCTGG	TTTTGCGATT	CTAAAATGTA	ATAATAAGAC	GTTCAATGGA	ACAGGACCAT
6430	6440	6450	6460	6470	6480
GTACAAATGT	CAGCACAGTA	CAATGTACAC	ATGGAATTAG	GCCAGTAGTA	TCAACTCAAC

6490	6500	6510	6520	6530	6540
TGCTGTTGAA	TGGCAGTCTA	GCAGAAGAAG	AGGTAGTAAT	TAGATCTGCC	AATTTACACAG
6550	6560	6570	6580	6590	6600
ACAATGCTAA	AACCATAATA	GTACAGCTGA	ACCAATCTGT	AGAAATTAAT	TGTACAAGAC
6610	6620	6630	6640	6650	6660
CCAACAACAA	TACAAGAAAA	AGTATCCGTA	TCCAGAGGGG	ACCAGGGAGA	GCATTTGTTA
6670	6680	6690	6700	6710	6720
CAATAGGAAA	AATAGGAAAT	ATGAGACAAG	CACATTGTAA	CATTAGTAGA	GCAAAAATGGA
6730	6740	6750	6760	6770	6780
ATGCCACTTT	AAAACAGATA	GCTAGCAAAT	TAAGAGAACA	ATTTGGAAAT	AATAAAACAA
6790	6800	6810	6820	6830	6840
TAATCTTTAA	GCAATCCTCA	GGAGGGGACC	CAGAAATTGT	AACGCACAGT	TTTAATTGTG
6850	6860	6870	6880	6890	6900
GAGGGGAATT	TTTCTACTGT	AATTCAACAC	AACTGTTTAA	TAGTACTTGG	TTTAATAGTA
6910	6920	6930	6940	6950	6960
CTTGGAGTAC	TGAAGGGTCA	AATAACACTG	AAGGAAGTGA	CACAATCACA	CTCCCATGCA
6970	6980	6990	7000	7010	7020
GAATAAAACA	ATTTATAAAC	ATGTGGCAGG	AAGTAGGAAA	AGCAATGTAT	GCCCCCTCCA
7030	7040	7050	7060	7070	7080
TCAGCGGACA	AATTAGATGT	TCATCAAATA	TTACAGGGCT	GCTATTAACA	AGAGATGGTG
7090	7100	7110	7120	7130	7140
GTAATAACAA	CAATGGGTCC	GAGATCTTCA	GACCTGGAGG	AGGAGATATG	AGGGACAATT
7150	7160	7170	7180	7190	7200
GGAGAAGTGA	ATTATATAAA	TATAAAGTAG	TAAAAATTGA	ACCATTAGGA	GTAGCACCCA
7210	7220	7230	7240	7250	7260
CCAAGGCAAA	GAGAAGAGTG	GTGCAGAGAG	AAAAAAGAGC	AGTGGGAATA	GGAGCTTTGT
7270	7280	7290	7300	7310	7320
TCCTTGGGTT	CTTGGGAGCA	GCAGGAAGCA	CTATGGGCGC	ACGGTCAATG	ACGCTGACGG
7330	7340	7350	7360	7370	7380
TACAGGCCAG	ACAATTATTG	TCTGGTATAG	TGCAGCAGCA	GAACAATTTG	CTGAGGGGCTA
7390	7400	7410	7420	7430	7440
TTGAGGCGCA	ACAGCATCTG	TTGCAACTCA	CAGTCTGGGG	CATCAAGCAG	CTCCAGGCAA

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      7450      7460      7470      7480      7490      7500
GAATCCTGGC TGTGGAAAGA TACCTAAAGG ATCAACAGCT CCTGGGGATT TGGGGTTGCT

      7510      7520      7530      7540      7550      7560
CTGGAAAAC TATTGACACC ACTGCTGTGC CTTGGAATGC TAGTTGGAGT AATAAATCTC

      7570      7580      7590      7600      7610      7620
TGGAACAGAT TTGGAATAAC ATGACCTGGA TGGAGTGGGA CAGAGAAATT AACAATTACA

      7630      7640      7650      7660      7670      7680
CAAGCTTAAT ACATTCCTTA ATTGAAGAAT CGAAAACCA GCAAGAAAAG AATGAACAAG

      7690      7700      7710      7720      7730      7740
AATTATTGGA ATTAGATAAA TGGGCAAGTT TGTGGAATTG GTTTAACATA ACAAATTGGC

      7750      7760      7770      7780      7790      7800
TGTGGTATAT AAAAATATTC ATAATGATAG TAGGAGGCTT GGTAGGTTTA AGAATAGTTT

      7810      7820      7830      7840      7850      7860
TTGCTGTACT TTCTATAGTG AATAGAGTTA GGCAGGGATA TTCACCATTA TCGTTTCAGA

      7870      7880      7890      7900      7910      7920
CCCACCTCCC AACCCCGAGG GGACCCGACA GGCCCGAAGG AATAGAAGAA GAAGGTGGAG

      7930      7940      7950      7960      7970      7980
AGAGAGACAG AGACAGATCC ATTCGATTAG TGAACGGATC CTTAGCACTT ATCTGGGACG

      7990      8000      8010      8020      8030      8040
ATCTGCGGAG CCTTGTGCCT CTTCAGCTAC CACCGCTTGA GAGACTTACT CTTGATTGTA

      8050      8060      8070      8080      8090      8100
ACGAGGATTG TGGAACCTTCT GGGACGCAGG GGGTGGGAAG CCCTCAAATA TTGGTGAAT

      8110      8120      8130
CTCCTACAGT ATTGGAGTCA GGAAGTAAAG AA.

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144. (previously presented) A cloned DNA of Human Immunodeficiency Virus

Type 1 (HIV-1), wherein the DNA comprises the sequence

CTCAATAAAGCTTGCCTTG, and the DNA comprises the sequence:

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                                6100      6110      6120
                                GAATGC  TACTAATACC  AATAGTAGTA

      6130      6140      6150      6160      6170      6180
ATACCAATAG TAGTAGCGGG GAAATGATGA TGGAGAAAGG AGAGATAAAA AACTGCTCTT

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6190 6200
TCAATATCAG CACAAGCATA.

145. (previously presented) A cloned DNA of Human Immunodeficiency Virus Type 1 (HIV-1), wherein the DNA comprises the sequence
CTCAATAAAGCTTGCCTTG, and the DNA comprises the sequence:

6260 6270 6280 6290 6300
T AATGATACTA CCAGCTATAC GTTGACAAGT TGTAACACCT

6310
CAGTCATTAC.

146. (previously presented) A cloned DNA of Human Immunodeficiency Virus Type 1 (HIV-1), wherein the DNA comprises the sequence
CTCAATAAAGCTTGCCTTG, and the DNA comprises the sequence:

6390 6400 6410 6420
A ATAATAAGAC GTTCAATGGA ACAGGACCAT

6430 6440
GTACAAATGT CAGCACAGTA.

147. (previously presented) A cloned DNA of Human Immunodeficiency Virus Type 1 (HIV-1), wherein the DNA comprises the sequence
CTCAATAAAGCTTGCCTTG, and the DNA comprises the sequence:

6490 6500 6510 6520 6530 6540
GTTGAA TGGCAGTCTA GCAGAAGAAG AGGTAGTAAT TAGATCTGCC AATTTCACAG

6550 6560 6570 6580 6590 6600
ACAATGCTAA AACCATAATA GTACAGCTGA ACCAATCTGT AGAAATTAAT TGTACAAGAC

6610 6620
CCAACAACAA TACAAGAAAA.

148. (previously presented) A cloned DNA of Human Immunodeficiency Virus Type 1 (HIV-1), wherein the DNA comprises the sequence
CTCAATAAAGCTTGCCTTG, and the DNA comprises the sequence:

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        6860        6870        6880        6890        6900
          T AATTCAACAC AACTGTTTAA TAGTACTTGG TTTAATAGTA

        6910        6920        6930
CTTGGAGTAC TGAAGGGTCA AATAACACTG.

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149. (previously presented) A cloned DNA of Human Immunodeficiency Virus Type 1 (HIV-1), wherein the DNA comprises the sequence CTCAATAAAGCTTGCCTTG, and the DNA comprises the sequence:

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                                7540        7550        7560
                                GAATGC TAGTTGGAGT AATAAATCTC

        7570        7580        7590        7600        7610        7620
TGGAACAGAT TTGGAATAAC ATGACCTGGA TGGAGTGGGA CAGAGAAATT AACAATTACA

        7630
CAAGCTTAAT.

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150. (previously presented) A method of using the cloned DNA of any of claims 142-149 to detect HIV-1 RNA comprising:

- (a) providing a biological fluid comprising HIV-1 infected cells;
- (b) preparing a cell-free supernatant from the biological fluid;
- (c) isolating HIV-1 virions from the cell-free supernatant;
- (d) disrupting the virions to release HIV-1 RNA;
- (e) contacting the HIV-1 RNA with the HIV-1 DNA of any of claims 142-149; and
- (f) detecting hybridization between the HIV-1 RNA and the HIV-1 DNA.

151. (currently amended) A method of making HIV-1 RNA ~~nucleic acid~~ hybridizable with the cloned DNA of any of claims 142-149 comprising:

- (a) providing a biological fluid comprising HIV-1 infected cells;
- (b) preparing a cell-free supernatant from the biological fluid;
- (c) isolating HIV-1 virions from the cell-free supernatant; and
- (d) disrupting the virions to release HIV-1 RNA, thereby making HIV-1 RNA.